

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A fiber, wherein said fiber is produced by electrospinning a mixture that [[and]] comprises at least one mesoporous molecular sieve, and wherein the mesoporous molecular sieve is synthesized from a mesoporous precursor material, and said mesoporous precursor material is formed into a gel by combining a metal oxide an organosilane [[and]] a surfactant, at least one acid and at least one alcohol.

2-3. (Canceled).

4. (Currently amended) The fiber of claim 1, wherein said ~~metal oxide is selected from the group consisting of silicon dioxide, aluminum oxide, titanium dioxide, niobium oxide, tungsten oxide, tantalum oxide, vanadium pentoxide, indium tin oxide, calcium aluminate and mixtures thereof~~ said organosilane is selected from the group consisting of tetramethylorthosilicate, phenyltrimethoxy silane, p-aminophenyltrinethoxy silane, phenyl-trimethylchlorosilane and trimethylchlorosilane.

5. (Previously presented) The fiber of claim 1, wherein said fiber has a diameter ranging from about 10 nanometers up to about 1,000 nanometers.

6. (Currently amended) A network of fibers wherein, said network comprises fibers comprising at least one mesoporous molecular sieve wherein, said fibers are produced by electrospinning, and wherein the mesoporous molecular sieve is synthesized from a mesoporous precursor material, and said mesoporous precursor material is formed into a gel by combining a metal oxide a silica source, [[and]] a surfactant, at least one acid and at least one alcohol.

7-8. (Canceled).

9. (Currently amended) The fibers of claim 6, wherein said ~~metal oxide is selected from the group consisting of silicon dioxide, aluminum oxide, titanium dioxide, niobium oxide, tungsten oxide, tantalum oxide, vanadium pentoxide, indium tin oxide, calcium aluminate and mixtures thereof~~ said organosilane is selected from the group consisting of tetramethylorthosilicate, phenyltrimethoxy silane, p-aminophenyltrinethoxy silane, phenyl-trimethylchlorosilane and trimethylchlorosilane.

10-30. (Canceled)

31. (Currently amended) A method of making a network of fibers comprising:

electrospinning a fiberizable ~~material~~ mixture to form a network of fibers, wherein said ~~fibers~~ comprise mixture comprises at least one mesoporous molecular sieve, wherein the mesoporous molecular sieve is synthesized ~~from a mesoporous precursor material, and said mesoporous precursor material is formed into a gel~~ by combining a ~~metal oxide~~ a silica source, ~~[[and]]~~ a surfactant, at least one acid and at least one alcohol.

32-33. (Canceled)

34. (Currently amended) The method of claim 31, wherein said ~~metal oxide is selected from the group consisting of silicon dioxide, aluminum oxide, titanium dioxide, niobium oxide, tungsten oxide, tantalum oxide, vanadium pentoxide, indium tin oxide, calcium aluminate and mixtures thereof~~ said organosilane is selected from the group consisting of tetramethylorthosilicate, phenyltrimethoxy silane, p-aminophenyltrinethoxy silane, phenyltrimethylchlorosilane and trimethylchlorosilane.

35. (New) The fiber of claim 1 wherein said at least one acid is either hydrochloric acid or acetic acid.

36. (New) The fiber of claim 1 wherein said at least one alcohol is either ethanol or propanol.

37. (New) The fiber of claim 1 wherein the surfactant is either pluronic P-123 or Brij 76.